

## ABSTRACT OF THE DISCLOSURE

A communication technology for allowing a mobile communication system to accommodate variable rate users, while obtaining a frequency diversity effect. A transmitter apparatus using, for transmission, transmission signals produced based on data symbols of a predetermined transmission method, comprising an FFT processing part for converting the data symbols to frequency domain data; an interleaver for sorting the frequency domain data; and an IFFT processing part for converting the sorted frequency domain data to a time domain signal; wherein the FFT processing part subjects  $Q$  received data symbols to  $Q$ -point FFT processing, the interleaver produces  $N$  data from  $Q$  data outputted from the FFT processing part (where  $N > Q$ ), and the IFFT processing part subjects the  $N$  data outputted from the interleaver to  $N$ -point IFFT processing.